

# Tabs

A comprehensive tab navigation component for organizing content into multiple panels. Features include multiple size variants (xs to xl), icon positioning, bordered styles, container backgrounds, custom styling, scrollable overflow, closeable tabs, and full accessibility support.

## How to use

### Basic Usage

The Tabs component allows you to organize content into multiple panels, with only one visible at a time. This is ideal for dashboards, settings, or any interface where users need to switch between related views without navigating away from the page.

- Default behavior: Horizontal layout, first tab active, content panel below.
- Usage: Pass an array of tab objects to the tabs input. Each tab can have a label, content, and optional properties.

```
import { AavaTabsComponent } from "@aava/play-core";
```

### Variants

Tabs support multiple visual variants for different use cases:

- Default: Standard tabbed navigation with underline indicator and optional icons
- Button: Tabs appear as pill or rounded buttons with optional borders and custom styling
- Icon: Tabs display icons with labels, supporting start/end icon positioning
- Icon Only Square: Compact square tabs showing only icons, ideal for toolbars
- Icon Only Circle: Circular icon-only tabs for minimal interfaces

Choose the variant that best fits your design and use case. The variant input controls the style, with additional options like `bordered`, `iconPosition`, and `buttonShape` for further customization.

```
<aava-tabs
  [tabs]="[
    { id: 'tab1', label: 'Tab 1', content: 'Content 1' },
    { id: 'tab2', label: 'Tab 2', content: 'Content 2' },
    { id: 'tab3', label: 'Tab 3', content: 'Content 3' }
  ]"
  activeTabId="tab1"
></aava-tabs>
```

## Size Variants

Tabs support five size variants to fit different interface densities and use cases:

- Extra Small (xs): Compact tabs for dense interfaces or mobile layouts
- Small (sm): Smaller tabs for secondary navigation or sidebar use
- Medium (md): Default size, balanced for most use cases
- Large (lg): Larger tabs for primary navigation or desktop interfaces
- Extra Large (xl): Maximum size for prominent navigation or accessibility needs

Choose the size that best matches your interface hierarchy and available space. The size input controls the overall scale of tabs, icons, and spacing.

```
<!-- Default variant with underline -->
```

```
<aava-tabs
```

```
  [tabs]="[
    { id: 'default1', label: 'Home', iconName: 'home', content: 'Welcome to the home page' },
    { id: 'default2', label: 'About', iconName: 'info', content: 'Learn more about us' },
    { id: 'default3', label: 'Contact', iconName: 'phone', content: 'Get in touch' }
  ]"
```

```
  variant="default"
```

```
  activeTabId="default1"
```

```
  [showContentPanels]="false"
```

```
></aava-tabs>
```

```
<!-- Button variant - Pill with Border -->
```

```
<aava-tabs
```

```
  [tabs]="[
    { id: 'pill1', label: 'Overview', iconName: 'layout', content: 'Overview content' },
    { id: 'pill2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'Analytics content' },
    { id: 'pill3', label: 'Reports', iconName: 'file-text', content: 'Reports content' }
  ]"
```

```
  variant="button"
```

```
  buttonShape="pill"
```

```
  [bordered]="true"
```

```
  size="sm"
```

```
  activeTabId="pill1"
```

```
  [showContentPanels]="false"
```

```
></aava-tabs>
```

```
<!-- Button variant - Rectangle with Border -->
```

```
<aava-tabs
```

```
  [tabs]="[
    { id: 'rect1', label: 'Projects', iconName: 'folder', content: 'Projects content' },
    { id: 'rect2', label: 'Tasks', iconName: 'check-square', content: 'Tasks content' },
    { id: 'rect3', label: 'Settings', iconName: 'settings', content: 'Settings content' }
  ]"
```

```
  variant="button"
```

```
  buttonShape="rounded"
```

```
  [bordered]="true"
```

```
  size="sm"
```

```
  activeTabId="rect1"
```

```
  [showContentPanels]="false"
```

```
></aava-tabs>
```

```
<!-- Icon Only Square variant -->
```

```
<aava-tabs
```

```
  [tabs]="[
    { id: 'icon1', iconName: 'home', label: 'Home', content: 'Home content' },
    { id: 'icon2', iconName: 'users', label: 'Users', content: 'Users content' },
    { id: 'icon3', iconName: 'settings', label: 'Settings', content: 'Settings content' }
  ]"
```

```
  variant="iconOnlySquare"
```

```
  activeTabId="icon1"
```

```
  [showContentPanels]="false"
```

```
></aava-tabs>
```

# Tabs with Icons

Add icons to tabs using the `iconName` property in tab objects. Control icon positioning with the `iconPosition` input for flexible layouts.

- Icon Position: Use `iconPosition="start"` (default) or `iconPosition="end"` to control icon placement
- Icon-Only Variants: Use `iconOnlySquare` or `iconOnlyCircle` variants for compact, icon-only tabs
- When to use: For quick recognition, navigation clarity, or when space is limited

<!-- Extra Large Size -->

<aava-tabs

[tabs]="[

{ id: 'xl1', label: 'Overview', iconName: 'layout', content: 'XL Overview Content' },

{ id: 'xl2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'XL Analytics Conte

{ id: 'xl3', label: 'Reports', iconName: 'file-text', content: 'XL Reports Content' }

]"

variant="button"

buttonShape="rounded"

size="xl"

[bordered]="true"

activeTabId="xl1"

[showContentPanels]="false"

></aava-tabs>

<!-- Large Size -->

<aava-tabs

[tabs]="[

{ id: 'lg1', label: 'Overview', iconName: 'layout', content: 'LG Overview Content' },

{ id: 'lg2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'LG Analytics Conte

{ id: 'lg3', label: 'Reports', iconName: 'file-text', content: 'LG Reports Content' }

]"

variant="button"

buttonShape="rounded"

size="lg"

[bordered]="true"

activeTabId="lg1"

[showContentPanels]="false"

></aava-tabs>

<!-- Medium Size (Default) -->

<aava-tabs

[tabs]="[

{ id: 'md1', label: 'Overview', iconName: 'layout', content: 'MD Overview Content' },

{ id: 'md2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'MD Analytics Conte

{ id: 'md3', label: 'Reports', iconName: 'file-text', content: 'MD Reports Content' }

]"

variant="button"

buttonShape="rounded"

size="md"

[bordered]="true"

activeTabId="md1"

[showContentPanels]="false"

></aava-tabs>

<!-- Small Size -->

<aava-tabs

[tabs]="[

{ id: 'sm1', label: 'Overview', iconName: 'layout', content: 'SM Overview Content' },

{ id: 'sm2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'SM Analytics Conte

{ id: 'sm3', label: 'Reports', iconName: 'file-text', content: 'SM Reports Content' }

]"

variant="button"

```

        buttonShape="rounded"
        size="sm"
        [bordered]="true"
        activeTabId="sm1"
        [showContentPanels]="false"
    ></aava-tabs>

<!-- Extra Small Size -->
<aava-tabs
    [tabs]="[
        { id: 'xs1', label: 'Overview', iconName: 'layout', content: 'XS Overview Content' },
        { id: 'xs2', label: 'Analytics', iconName: 'chart-no-axes-combined', content: 'XS Analytics Content' },
        { id: 'xs3', label: 'Reports', iconName: 'file-text', content: 'XS Reports Content' }
    ]"
    variant="button"
    buttonShape="rounded"
    size="xs"
    [bordered]="true"
    activeTabId="xs1"
    [showContentPanels]="false"
></aava-tabs>

```

## Tabs with Badges

Tabs can display badges to indicate counts, notifications, or status. Add a badge property to any tab object.

- How: Set badge to a number or string.
- When to use: For unread counts, alerts, or status indicators.

```

<!-- Icons at start (default) -->
<aava-tabs
  [tabs]="[
    { id: 'home1', label: 'Home', iconName: 'home', content: 'Welcome home!' },
    { id: 'user1', label: 'Profile', iconName: 'user', content: 'Your profile' },
    { id: 'settings1', label: 'Settings', iconName: 'settings', content: 'App settings' }
  ]"
  iconPosition="start"
  activeTabId="home1"
  [showContentPanels]="false"
</aava-tabs>

<!-- Icons at end -->
<aava-tabs
  [tabs]="[
    { id: 'home2', label: 'Home', iconName: 'chevron-right', content: 'Welcome home!' },
    { id: 'user2', label: 'Profile', iconName: 'chevron-right', content: 'Your profile' },
    { id: 'settings2', label: 'Settings', iconName: 'chevron-right', content: 'App settings' }
  ]"
  iconPosition="end"
  activeTabId="home2"
  [showContentPanels]="false"
</aava-tabs>

<!-- Icon Only Square -->
<aava-tabs
  [tabs]="[
    { id: 'home3', label: 'Home', iconName: 'home', content: 'Welcome home!' },
    { id: 'user3', label: 'Profile', iconName: 'user', content: 'Your profile' },
    { id: 'settings3', label: 'Settings', iconName: 'settings', content: 'App settings' }
  ]"
  variant="iconOnlySquare"
  activeTabId="home3"
  [showContentPanels]="false"
</aava-tabs>

```

## Scrollable Tabs

For interfaces with many tabs, enable scrollable to handle overflow. Scrollable tabs show left/right arrows.

- **Scrollable:** Use for wide tab sets where horizontal space is available.

```

<aava-tabs
  [tabs]="[
    { id: 'tab1', label: 'Inbox', badge: 5, content: 'Inbox Content' },
    { id: 'tab2', label: 'Notifications', badge: 2, content: 'Notifications Content' },
    { id: 'tab3', label: 'Archive', content: 'Archive Content' }
  ]"
  activeTabId="tab1"
</aava-tabs>

```

# Vertical Tabs

Switch to vertical orientation for side navigation or settings panels. Set `orientation="vertical"` .

- When to use: For sidebar navigation, settings, or when vertical space is preferred.

```
<aava-tabs
  [tabs]="[
    { id: 'tab1', label: 'Tab 1', content: 'Content 1' },
    { id: 'tab2', label: 'Tab 2', content: 'Content 2' },
    { id: 'tab3', label: 'Tab 3', content: 'Content 3' },
    { id: 'tab4', label: 'Tab 4', content: 'Content 4' },
    { id: 'tab5', label: 'Tab 5', content: 'Content 5' },
    { id: 'tab6', label: 'Tab 6', content: 'Content 6' }
  ]"
  scrollable="true"
  maxVisibleTabs="4"
  activeTabId="tab1"
></aava-tabs>
```

## Custom Styles

Tabs provide multiple styling options for comprehensive customization:

- Tab Row Styling: Use `tabRowWrapperStyles` and `tabRowBackgroundStyles` for custom tab container appearance
- Container Backgrounds: Enable `showTabsContainerBg` for fixed padding and background, or `showcontainerBg` for full container styling
- Custom CSS Properties: Use `customStyles` to override design tokens like `--tabs-gap` and color variables
- Active Button Styles: Customize active button appearance with `activeButtonTabStyles` for button variants
- Border Options: Add borders to button and icon variants using the bordered input

These options allow complete visual customization while maintaining accessibility and functionality.



```

<lt;aava-tabs
  [tabs]="[
    { id: 'tab1', label: 'Tab 1', content: 'Content 1' },
    { id: 'tab2', label: 'Tab 2', content: 'Content 2' },
    { id: 'tab3', label: 'Tab 3', content: 'Content 3' }
  ]"
  orientation="vertical"
  activeTabId="tab1"
</aava-tabs>

```

## API Reference

### Inputs

Property	Type	Default	Description
tabs	TabItem[]	[]	Array of tab objects (see TabItem interface)
activeTabId	string	"	ID of the currently active tab
variant	'default'   'button'   'icon'   'iconOnlySquare'   'iconOnlyCircle'	'default'	Visual style of the tabs
size	'xs'   'sm'   'md'   'lg'   'xl'	'md'	Size of the tabs
bordered	boolean	false	Add border around tabs (for icon-only variants)
iconPosition	'start'   'end'	'start'	Position of icons relative to text
showcontainerBg	boolean	false	Show background and border for entire tabs container

Property	Type	Default	Description
showTabsContainerBg	boolean	false	Show tabs container background with fixed padding
customStyles	Record<string, string>	{}	Custom styles for the tabs component
disabled	boolean	false	Disable all tabs
scrollable	boolean	false	Enable horizontal scrolling for overflow
showDropdown	boolean	false	Show dropdown for overflowed tabs
maxVisibleTabs	number	5	Max number of visible tabs before overflow
allowTabClose	boolean	false	Allow tabs to be closed
centeredTabs	boolean	false	Center the tabs in the container
fullWidth	boolean	false	Tabs take full width of container
animateTransitions	boolean	true	Animate tab transitions
lazyLoadContent	boolean	false	Lazy load tab content
persistActiveTab	boolean	true	Persist active tab on tab list changes
ariaLabel	string	'Tabs navigation'	ARIA label for accessibility

Property	Type	Default	Description
activeButtonTabStyles	Record<string, string>	{}	Custom styles for active button tab (button variant)
buttonShape	'rounded'   'pill'	'rounded'	Shape for button variant
showContentPanels	boolean	true	Show content panels below tabs
tabRowWrapperStyles	Record<string, string>	{}	Custom styles for tab row wrapper
tabRowBackgroundStyles	Record<string, string>	{}	Custom styles for tab row background
orientation	'horizontal'   'vertical'	'horizontal'	Orientation of the tabs

## TabItem Interface

### Outputs

Event	Type	Description
tabChange	EventEmitter<TabItem>	Emitted when the active tab changes
tabClose	EventEmitter<TabItem>	Emitted when a tab is closed
tabsReorder	EventEmitter<TabItem[]>	Emitted when tabs are reordered
dropdownToggle	EventEmitter<boolean>	Emitted when the dropdown is toggled

### Methods

- onTabClick(tab: TabItem): void — Activate a tab programmatically
- onTabClose(tab: TabItem, event: Event): void — Close a tab programmatically

- `toggleDropdown(): void` — Toggle the dropdown menu
- `scrollLeft(): void` / `scrollRight(): void` — Scroll the tab list

## Accessibility

The Tabs component follows WAI-ARIA accessibility guidelines and provides comprehensive keyboard navigation:

- Keyboard Navigation : Full support for Tab, Arrow keys (Left/Right/Up/Down), Enter, and Space
- ARIA Roles : Proper `tablist`, `tab`, and `tabpanel` roles for screen reader compatibility
- ARIA Attributes : `aria-selected`, `aria-controls`, `aria-labelledby`, and `aria-disabled` for state communication
- Focus Management : Visible focus indicators and proper tab sequence navigation
- Screen Reader Support : Descriptive labels, state announcements, and semantic HTML structure
- Keyboard Shortcuts : Arrow keys for tab navigation, Enter/Space for activation
- High Contrast : Enhanced borders and indicators for visibility in high contrast mode

## Design Tokens & Theming

AAVA Play Tabs use semantic design tokens for all surfaces, spacing, typography, and motion. The component exposes scoped override tokens for fine-tuning appearance while maintaining design system consistency.

### Available Design Tokens for Tabs

#### Size & Layout Tokens

Token	Purpose	Default Value
<code>--tabs-gap</code>	Spacing between tabs	Theme-based

#### Color & Visual Tokens

Token	Purpose	Default Value
<code>--tabs-tab-color</code>	Color for inactive tab text	Theme-based
<code>--tabs-tab-active-color</code>	Color for active tab text	Theme-based

Token	Purpose	Default Value
--tabs-tab-disabled-color	Color for disabled tab text	Theme-based

## Badge & Icon Tokens

Token	Purpose	Default Value
--tabs-icon-size	Default size for tab icons	Theme-based

## Best Practices

### Design Guidelines

- Semantic Organization : Group related content logically and use clear, descriptive tab labels
- Tab Count : Limit to 5-7 tabs for optimal usability; use scrollable or dropdown for more
- Variant Selection : Choose variants based on context (default for content, button for actions, icon-only for compact)
- Size Selection : Use appropriate sizes (xs-xl) based on interface hierarchy and available space
- Icon Positioning : Consider iconPosition="end" for navigation arrows or action indicators
- Border Usage : Apply bordered input for better visual separation in dense interfaces
- Container Backgrounds : Use showTabsContainerBg or showcontainerBg for visual grouping
- Visual Hierarchy : Use active states, badges, and icons to guide user attention appropriately
- Responsive Design : Consider vertical orientation or dropdown behavior for mobile devices
- Consistent Sizing : Match tab sizes to surrounding interface elements and content density

### Accessibility

- Meaningful Labels : Provide clear, descriptive labels that explain each tab's content or purpose
- Unique IDs : Ensure each tab has a unique ID for proper ARIA relationships

- Keyboard Support : Test complete keyboard navigation flow including arrow keys and activation
- Screen Reader Testing : Verify proper announcement of tab states, content, and navigation
- Focus Indicators : Maintain clear visual focus states for keyboard navigation
- Color Contrast : Ensure sufficient contrast for all tab states and variants
- Reduced Motion : Respect user preferences for reduced motion in transitions

## Performance

- Lazy Loading : Enable lazyLoadContent for tabs with heavy content to improve initial load
- Content Optimization : Only render active tab content unless pre-loading is necessary
- Icon Efficiency : Use icon systems efficiently and avoid loading unnecessary icon variants
- Smooth Scrolling : Use hardware-accelerated scrolling for large tab sets
- Event Handling : Debounce rapid tab switching and optimize event listeners
- Bundle Optimization : Import only needed variants and features to minimize bundle size
- Memory Management : Properly clean up event listeners and subscriptions in closeable tabs